UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,706	11/05/2003	Linda Van Patten Benhase	TUC920030059US1	7080

46263 7590 03/16/2007 SCULLY, SCOTT, MURPHY, & PRESSER 400 GARDEN CITY PL GARDEN CITY, NY 11530	**EXAMINER** CHEN, TE Y

ART UNIT	PAPER NUMBER
2161	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*17 January 2007*</u>.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　a)☐ All　b)☐ Some * c)☐ None of:

　　1.☐ Certified copies of the priority documents have been received.

　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on

01/17/2007 has been entered.

This office action is in response to the amendment filed on Jan. 17, 2007.

Claims 1-22 are pending for examination; claims 1, 8, 14 and 20 have been

amended; claim 21-22 have been newly added.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees. A nonstatutory
obviousness-type double patenting rejection is appropriate where the conflicting claims
are not identical, but at least one examined application claim is not patentably distinct
from the reference claim(s) because the examined application claim is either anticipated
by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140
F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.
1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 8 and 14, are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 14-16 and 18-19 of copending Application No. 10/449,671. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 1, 8 and 14 of the present application merely repeat the features of claims 1, 14-16 and 18-19 of copending Application No. 10/449,671 with few conventional details. However, it is obvious for an ordinary skilled person in the art at the time the invention was made to modify the broader claims of 10/449,671 with common details for the purpose to clarify the intended limitations of his/hers invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-19, are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Publication No. 2004/0123,180 issued to Soejima et al. (hereinafter referred as

Soejima), in view of U.S. Patent No. 7,096,269 issued to Yamagami et al. (hereinafter

referred as Yamagami).

Claim 1:

Soejima discloses method for pairing source and target volumns for the purpose

of copying data from the source volume to the target volume [e.g., P2, Sections: 0034 –

P. 3, 0040], comprising the steps:

graphically depicting representations of storage resources in a single view [e.g.,

Fig. 22 and associated texts];

selecting a pair of said storage resources including identifying one of said pair as

the source volume from which data are to be copied, and identifying the other of said

pair as the target volume to which the data are to be copied. [e.g., P. 10, Sections:

0147-0150, Fig. 22 & P, 16, Sections: 0227-0242, Fig(s). 25-28 and associated texts];

and

after said pair have been selected and before copying any data from the source

volume to the target volume, implementing checks to determine if said selected pair

satisfy predefined rules [e.g., the storage configuration modification processing at

Fig(s). 18-19 and associated texts, Sections: 0162- 0172].

sending alert messages regarding the selected pair if the selected pair do not

satisfy the predefined rules [e.g., Section: 0170].

Soejima does not specifically disclose that the limitations as claimed, including:

1) the selection of the pair of storage resources is on a single view.

2) after selecting the pair, the user is presented with a confirmation panel where the user can both view and change the volumes of the pair; and

3) the selection step further including the selection of multiple pairs of source and target volumes, and swapping the target volume in one pair with the target volume in another pair within the confirmation panel.

However, Yamagami discloses the claimed features including:

1) the selection of the pair of storage resources is being performed in a single view [e.g., Abstract, Fig. 6 and associated texts];

2) after selecting the pair, the user is presented with a confirmation panel where the user can both view and change the volumes of the pair [e.g., Fig. 7 and associated texts];

3) the selection step further including the selection of multiple pairs of source and target volumes, and swapping the target volume in one pair with the target volume in another pair within the confirmation panel [e.g., Abstract, col. 11, lines 55 - col. 12, lines 67, Fig(s). 8, 10, 13 and associated texts].

Soejima and Yamagami are both of the same endeavor for facilitating the copying of data from source volume to the target volume via graphic user interface, therefore, with the teachings of Soejima and Yamagami in front of him/her, an ordinary skilled person in the art at the time the invention was made would be motivated to

modify Soejima's screen with a console management schema of a storage system that

maps/changes the storage system path selection table [e.g., 300, Fig. 3] and path group

table [e.g., 400, Fig. 4] based on the multiple source volume selected by a user via a

single view window [e.g., Fig. 6] for managing the setups and swapping of target

volumes in respond to the user's triangle button selections and with the aids of using at

least one of the components such as the path switch mechanism [e.g., the unit 150, Fig.

10] which coupled to the management console [e.g., the unit 120a, Fig. 10] as taught by

Yamagami, because by doing so, the combined system will be upgraded with a more

user friendly GUI to facilitate the selecting of multiple source volumes for copying into

the paired target volumes, and thereby providing a snapshot of the current copying

status for the selected storage transactions.

Claim 2:

Except the limitations recited in claim 1, the combined system of Soejima and

Yamagami further discloses graphical depictions are side-by-side depictions in the

single view of a logical configuration of the storage resources [e.g., Soejima: Fig. 25 and

associated texts].

Claim 3:

Except the limitations recited in claim 2, the combined system of Soejima and

Yamagami further discloses that graphical depictions are hierarchical trees [e.g.,

Yamagami: [e.g., the unit: 610, Fig. 6].

Claim 4:

Except the limitations recited in claim 1, the combined system of Soejima and

Yamagami discloses that the storage resources include a source subsystem having a

multitude of source storage volumes, and a target subsystem having a multitude of

target storage volumes; and each of the pairs consists of one of the source storage

volumes and one of the target storage volumes [e.g., Soejima: the units: 28050, 28100,

Fig. 28].

Claim 5:

Except the limitations recited in claim 4, the combined system of Soejima and

Yamagami discloses that the selecting step includes the steps of: selecting a number of

source storage volumes; and selecting a number of target storage volumes; and

wherein one of the checks ensures that the number of selected source storage volumes

is equal to the number of selected target storage volumes [e.g., Soejima: P. 2, Sections:

0034-0039 & Fig. 5] .

Claim 6:

Except the limitations recited in claim 5, the combined system of Soejima and

Yamagami discloses the following:

the step of selecting a number of source storage volumes includes the step of

identifying a set of source storage volumes [e.g., Soejima: unit 19050, Fig. 19];

the step of selecting a number of target storage volumes includes the step of

identifying a set of target storage volumes [e.g., Soejima: unit 19060, Fig. 19]; and

the implementing step includes the step of, if the number of source storage

volumes in the set thereof is not equal to the number of target storage devices in the set

thereof, then displaying a message for indicating that the sets have unequal numbers of

storage devices [e.g., Soejima: units: 19070-19160, Fig. 19].

Claim 7:

Except the limitations recited in claim 1, the combined system of Soejima and

Yamagami discloses the implementing step includes the step of also implementing error

handling based on the predefined rules [e.g., Soejima: P. 11, Section: 0169-0170].

Claim 8:

This claim recites similar subject matters as claim 1 in form of system means,

hence, is rejected along for the same reason.

Claim 9:

This claim recites similar subject matters as claim 2 in form of system means,

hence, is rejected along for the same reason.

Claim 10:

This claim recites similar subject matters as claim 3 in form of system means, hence, is rejected along for the same reason.

Claim 11:

This claim recites similar subject matters as claim 4 in form of system means, hence, is rejected along for the same reason.

Claim 12:

This claim recites similar subject matters as claim 5 in form of system means, hence, is rejected along for the same reason.

Claim 13:

This claim recites similar subject matters as claim 6 in form of system means, hence, is rejected along for the same reason.

Claim 14:

This claim recites similar subject matters as claim 1 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Claim 15:

This claim recites similar subject matters as claim 2 in form of computer readable program storage medium, hence, is rejected along for the same reason.

Claim 16:

This claim recites similar subject matters as claim 3 in form of computer readable

program storage medium, hence, is rejected along for the same reason.

Claim 17:

This claim recites similar subject matters as claim 4 in form of computer readable

program storage medium, hence, is rejected along for the same reason.

Claim 18:

This claim recites similar subject matters as claim 5 in form of computer readable

program storage medium, hence, is rejected along for the same reason.

Claim 19:

This claim recites similar subject matters as claim 6 in form of computer readable

program storage medium, hence, is rejected along for the same reason.

Claim 20:

Except the limitations recited in claim 1, the combined system of Soejima and

Yamagami further discloses the following:

the selecting step including a user manually selecting the pair using the single

view to identify the source volume and the target volume [e.g., Yamagami: the units:

610, 620, 650, Fig. 6];

the storage resources are logical subsystems [e.g., Yamagami: the units: 610,

620, 650, Fig. 6];

the user may only select volumes from one logical subsystem on a source side

and one logical subsystem on a target side; and if the user tries to select volumes from

more than one logical subsystem on the source side, the user receives an error

message stating that the user cannot choose volumes from ore than one logical

subsystem [e.g., Yamagami: the use of units: 656, 657, 660, Fig. 6 and associated

texts];

As to claim 21, this claim recites similar subject matters as claim 20, in form of

computer system, hence, is rejected along for the same reason.

As to claim 22, this claim recites similar subject matters as claim 20, in form of

computer readable program storage medium, hence, is rejected along for the same

reason.

Response to Arguments

Applicant's arguments with respect to claims 1-22 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mofiz Apu can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Susan Y Chen
Examiner
Art Unit 2161

March 14, 2007